



# 12<sup>TH</sup>

International  
Conference on  
Sustainable  
Development in  
the **Minerals  
Industry**

July  
14-16, 2026

Four Points  
by Sheraton,  
Medellín,  
Colombia



International  
Conferences

Business  
Exhibitions

Experiential  
Learning



# S<sub>2</sub> D<sub>0</sub> I<sub>2</sub> M<sub>6</sub>

*Innovation for Sustainability*

Gran Patrocinador:



Organizan:



Apoyan:



Recent editions have taken place in:



# What is it?

International  
conferences

Business  
exhibitions

Experiential  
learning

The 12th International Conference on Sustainable Development in the Minerals Industry – SDIMI 2026 is a global forum where academia, industry, government, and international organizations converge to shape the future of sustainable mining.

Organized by the **Society of Mining Professors (SOMP), the Faculty of Mines of the National University of Colombia, and Enlace Ingeniería S.A.S.**, the event will bring together thought leaders, decision-makers, international experts, and companies that are investing in and transforming the mining industry worldwide.

After being hosted in cities such as Vancouver, Beijing, Sydney, Windhoek, and Turin, SDIMI now arrives in Medellín—one of the most dynamic innovation and business ecosystems in Latin America.

In today's context, where environmental and social responsibility are increasingly critical, SDIMI 2026 provides a platform to explore the latest innovations and strategies across the key pillars of sustainable mining:



Mining  
Operations



Mine  
Closure



Social  
Integration



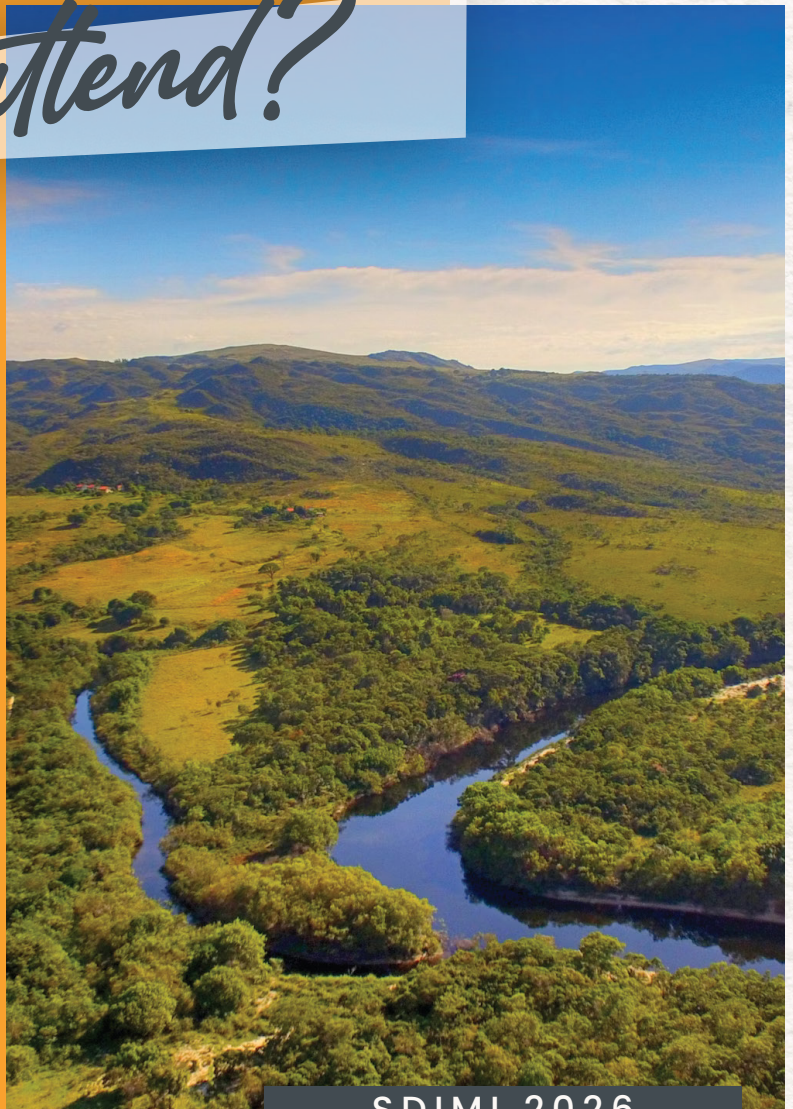
Governance

# Why attend?

**SDIMI 2026** is not just a conference: it is a strategic platform to update knowledge, build partnerships, identify trends, strengthen business relationships, and connect with the key players shaping the future of sustainable mining.

## Attendees will be able to:

- 01** Access high-level international conferences.
- 02** Learn about real-world cases, innovations, and global trends.
- 03** Participate in networking opportunities with industry leaders.
- 04** Discover technological, environmental, and social solutions applied to the sector.
- 05** Connect with companies, universities, governments, and international organizations.
- 06** Take part in a technical field experience.
- 07** Be part of a global conversation on sustainable mining.



**SDIMI 2026**

# The pillars shaping global mining

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## **MINING OPERATIONS**

New technologies, efficiency, productivity, digitalization, automation, artificial intelligence, and process optimization.

## **MINE CLOSURE**

Responsible closure strategies, environmental restoration, mining liabilities, and territorial transition.

## **SOCIAL INTEGRATION**

Communities, social license, gender, inclusion, small-scale mining, formalization, and territorial development.

## **GOVERNANCE**

ESG (Environmental, Social, and Governance factors), traceability, transparency, indicators, sustainable financing, public policy, and compliance.

# Strategic Topics

**SDIMI 2026** will address some of the most relevant topics for the future of the industry:

Socioeconomic, environmental, and operational indicators.

Governance and transparency in mining.

Climate change and mining resilience.

Circular economy and waste valorization.

Critical minerals and energy transition.

Digitalization, big data, artificial intelligence, and smart mining.

Water and sustainability in mining.

Mine closure and environmental liability remediation.

Gender equity, diversity, and inclusion.

Sustainability in artisanal and small-scale mining.

Sustainable financing and ESG criteria.

**SDIMI 2026**

# Speakers

SDIMI 2026 will feature global leaders and key figures who are transforming the conversation on sustainable mining:



• **Brigitte Baptiste**  
• **Colombia**

• Colombian biologist graduated from the Pontifical Xavierian University (Pontificia Universidad Javeriana), with a Master's degree in Tropical Conservation and Development from the University of Florida. She served for nearly a decade as Director of the Alexander von Humboldt Biological Resources Research Institute and currently serves as President (Rector) of EAN University, a higher education institution focused on sustainable entrepreneurship.

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• **Jürgen Kretschmann**  
• **Germany**

• German economist and internationally recognized expert in sustainable mining, resource management, post-mining strategies, and mining education. He served as President of the Technische Hochschule Georg Agricola (THGA) in Bochum (2006–2022) and currently chairs DMT-Gesellschaft für Lehre und Bildung mbH, in addition to serving as a professor at RWTH Aachen University.

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• **Juan María Menéndez**  
• **Spain**

• Expert in mineral processing, energy efficiency, critical metals recovery, and Director of the Raw Materials Institute of Asturias. Associate Professor of Mineral Processing Technology at the University of Oviedo and Director of the Raw Materials Institute of Asturias.

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• **Juan Camilo Nariño Alcocer**  
• **Colombia**

• Economist from Javeriana University, with a Master's degree in Public Affairs and Citizen Participation. He has held senior positions in both the public and private sectors, standing out for his business association leadership, regulatory expertise, and participation in international trade negotiations. He served as Vice President of ANDI, Colombia's Anti-Corruption Czar, and Co-Chair of the Pacific Alliance Business Council.

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• **Juan C. Lucena**  
• **United States**

• Director of the Humanitarian Engineering Program at Colorado School of Mines and a recognized leader in sustainability, social justice, and ethics in engineering.  
• He holds a Ph.D. in Science and Technology Studies from Virginia Tech and degrees in Mechanical and Aeronautical Engineering from Rensselaer Polytechnic Institute.

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• **Óscar Jaime Restrepo Baena**  
• **Colombia**

• Professor at the Faculty of Mines of the National University of Colombia, Medellín campus, with more than 28 years of experience in mining, extractive metallurgy, materials science, and sustainable resource development. He holds a Ph.D. in Metallurgy and Materials from the University of Oviedo, Spain. He leads the Ignea Research Group and collaborates internationally on sustainable mining, materials innovation, water management in artisanal mining, and mercury reduction.



• **Wilfredo López**  
• **Colombia**

• Mining and Metallurgical Engineer, graduated from the School of Mines at the National University of Colombia, and holds a Master's degree in Mining Engineering with a specialization in geostatistics from the Colorado School of Mines. He has more than 40 years of professional experience in mining operations, mineral reserve estimation, mine planning, design, and management for both open-pit and underground mines, involving gold, limestone, coal, and industrial mineral deposits.

# General agenda

## 14 Tuesday

Time	Session Title / Activity	Presenter	Location
7:00 - 8:00	Register		
8:00 - 8:30	Welcome		
8:30 - 9:00	Decarbonization and Circular Economy	Jurgen Kretschmann	Bochum, Germany
9:00 - 9:20	Mining and Climate Resilience Under the EU-Clean Industrial Deal	Walter Frenz	Aachen, Germany
9:20 - 9:40	Risk-Informed Climate Resilience for Mining: An Operational Playbook for Adaptation, Mitigation, and Indicators	Anna Luiza	Sao Paulo, Brazil
9:40 - 10:00	Panel Empresas		
10:00 - 10:30	Juan Camilo Nariño		Bogotá, Colombia
10:30 - 10:45	Coffee Break		
10:45 - 11:05	Sustainable Development: History, Critique, and Possibilities for Engineering Beyond the UN Sustainable Development Goals	Juan Lucena	Golden, Colorado, USA
11:05 - 11:25	Navigating the Energy Transition: Economic, Social, and Environmental Implications for South Africa's Coal Mining Sector	Tinashe Tholana	Johannesburg, South Africa
11:25 - 11:45	Characteristics and Coal Bed Methane (CBM) Potential of Cerrejón Formation (Guajira Basin, Colombia) Coals	Iker Senguler	Istanbul, Türkiye
11:45 - 12:05	Panel Empresas		
12:05 - 12:35	Regenerative Perspectives on Equatorial Mining	Bridgitte Baptiste	Bogotá, Colombia
12:35 - 14:00	Lunch		
14:00 - 14:20	A Reference Life Cycle Inventory to Support the Decarbonization of Global Primary Copper Production	Stefano Antonini	Turin, Italy
14:20 - 14:40	Life Cycle Assessment of Mineral Raw Materials: Overcoming Challenges to Enable Better Decisions	Nasib Al Habib	Rolla, Missouri, USA
14:40 - 15:00	Social Sustainability of Digital Transformation in Mining: A Social Life Cycle Assessment Framework from the Mine.io Project	Isabella Bianco	Turin, Italy
15:00 - 15:20	Panel Empresas		
15:20 - 15:40	Coffee Break		
15:40 - 16:00	Decarbonization Pathways Beyond 2030: A Critical Analysis of Corporate Roadmaps in the Mining Industry	Stefano Antonini	Turin, Italy
16:00 - 16:20	Extraction of Multiple Critical Minerals from Coal-Derived Acid	Qingqing Huang	Morgantown, USA
16:20 - 16:40	Trade-Offs and Balances in the Recovery of CRMs from Low Grade Secondary Sources: Experience from Metallico Project	Gian Andrea Blengini	Turin, Italy
16:40 - 17:00	Panel Empresas		
18:00 - 21:00	Cultural Reception		

# 15 Wednesday

Time	Session Title / Activity	Presenter	Location
8:15 - 8:30	Welcome		
8:30 - 9:00	Are the Mineral Raw Materials Industries Levering the Sustainable Development?	Juan María Menéndez Aguado	Oviedo, España
9:00 - 9:20	ASM Production Trends for Critical Raw Materials in the Congo	Dr. Philip Schütte	Hannover, Alemania
9:20 - 9:40	Expand Appalachia: Modern Exploration of Historic Mining Areas for Future Material Feedstocks	Richard Bishop	Blacksburg, Virginia, USA
9:40 - 10:00	Unlocking Hidden Gold: From Informality to Investment Viability - A Systems-Based Approach to Optimising Zimbabwe's Artisanal and Small-Scale Mining Value Chain	Tinotenda L. Tingini	Johannesburg, South Africa
10:00 - 10:30	Panel Empresas		
10:30 - 10:45	Coffee Break		
10:45 - 11:05	Cleaner Gold Production Examples of Viable Hg-Free Small-Scale Mining Projects	Jacopo Seccatore	Antofagasta, Chile
11:05 - 11:25	Revalorization of Tailings Plant Waste Through Flotation, Roasting and Leaching of Gold	Juan Vega	Lima, Perú
11:25 - 11:45	Strategic Planning for Mine Closure in South Africa: From Compliance to Value Creation	Bright Mutandwa	Johannesburg, South Africa
11:45 - 12:05	A Focus on Socio-Economic Impacts of Mine Closure in Namibia	Harmony Musiyarira	Windhoek, Namibia
12:05 - 12:35	Panel Empresas		
12:35 - 14:00	Lunch		
14:00 - 14:20	Promoting Gender Equity, Diversity and Inclusion in Sustainable Mining: Perspectives on Implementing Sustainable Mining in African Mining Environments	Zinzile Mdluli	Johannesburg, South Africa
14:20 - 14:40	Integrating Gender Equity, Diversity, and Inclusion into Stakeholder Communication for Sustainable Mining: Insights from Western Australia	Chrysanthi Rodolaki	Kalgoorlie, Australia
14:40 - 15:00	Water Governance and Socio-Ecological Systems in Gold Mining: A PLS-SEM Analysis of Perceptions for Rural Sustainable Development	Paula Marcela Hernández Díaz	Medellín, Colombia
15:00 - 15:20	Panel Empresas		
15:20 - 15:40	Coffee Break		
15:40 - 16:00	Reshaping Social Sustainability in Mining Through Continuous Systemic Graph Analytics and AI-Driven Computational Social Sciences	Melissa Penagos	Medellín, Colombia
16:00 - 16:20	Mining for Development: Multilevel Governance and	José Esteban Bello Pedraza	Medellín, Colombia
16:20 - 16:40	Complicating the Social, Code Switching, and Epistemic Humility in Engineering Education: Sociotechnical Competencies with Applications to Mining	Shelby Mary Gilson	Golden, Colorado, USA
16:40 - 17:00	Panel Empresas		
19:00 - 22:00	Dinner		

# 16th Thursday

Time	Session Title / Activity	Presenter	Location
8:15 - 8:30	Welcome		
8:30 - 9:00	Sustainability and the Future of the Mining Industry	Wilfredo López	
9:00 - 9:20	A Systemic Architecture for ESG Data Governance in Mining: Implementing the Sustainability Monitoring and Intelligence Center (CMIS)	Melissa Penagos	Medellín, Colombia
9:20 - 9:40	PRO D.M.: A Generalized MCDM Decision-Support Platform with Application to Dust Suppressant Selection in Open-Pit Mining	Asieh Hekmat	Concepcion, Chile
9:40 - 10:00	Modeling the Mine Permitting Timeline in the Southwest United States Under Socio-Political Uncertainty: A Discrete-Event Simulation Approach	Jesus Castillo Gomez	Tucson, Arizona, USA
10:00 - 10:30	Cross-Sector Partnership for Biodiversity Conservation in Operational Areas of Extractive Sector Companies	Gustavo Aristizabal	Bogota, Colombia
10:30 - 10:45	Coffee Break		
10:45 - 11:05	Use of Incineration Residues from RSU	Oscar Jaime Restrepo	Medellín, Colombia
11:05 - 11:25	Sustainability in Non-Metallic Mining in La Guajira, Colombia: Performance Analysis of Limestone, Gypsum, Clay and Salt Operations	Danny Daniel López Juvinao	Rioacha, Colombia
11:25 - 11:45	An In-Depth Analysis of Current Work Management Practices, Models, and Challenges in South African Mining Industry	Joseph Githiria	Johannesburg, South Africa
11:45 - 12:05	Economineria la Base del Futuro Sostenible	Jorge Jaramillo	Medellín, Colombia
12:05 - 12:35	Modelo de Gestión de Pasivos Ambientales Mineros	Gustavo Viana	Medellín, Colombia
12:35 - 13:00	Closing		
13:00 - 14:00	Lunch		
14:00	Mining Experience		

# Practical Information and Travel Guidance for Visitors



## Air service

The arrival airport for international participants is José María Córdova International Airport (MDE), located in Rionegro, approximately 30 minutes from Medellín.

Medellín has direct and indirect air connections from major cities in the Americas, Europe, and other continents. There are direct flights from Madrid and multiple connections from cities such as Panama City, Bogotá, Miami, New York, Mexico City, Lima, Paris, Frankfurt, and Amsterdam.



## Ground transportation

From José María Córdova International Airport, attendees can easily travel to Medellín by taxi or private transportation.



## Visa and travel documents

Most international participants do not require a visa to enter Colombia. However, it is recommended to check the entry requirements in advance based on your country of origin.

If a visa is required, the event organizers can provide an invitation letter to support the application process.



## Weather and Dress Code

Medellín is known as the City of Eternal Spring and maintains average temperatures between 20 and 25 degrees Celsius. The recommended attire for academic sessions is business casual. For the main event dinner, formal attire or a cocktail dress is recommended.



## Banking and Cards

In Colombia, major international credit cards are accepted, including Visa, Mastercard, American Express, and Diners Club.

# Recommended hotels

To facilitate the stay of both national and international attendees, hotels located in strategic areas of Medellín are recommended, close to the event venue and the city's main business and dining districts.

Receive a discount using the suggested booking code: **SDIMI2026**.



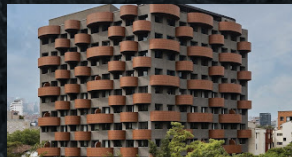
## Hotel Dann Carlton y Belfort

El Poblado (+57) 604 444 51 51  
[www.danncarlton.com](http://www.danncarlton.com)



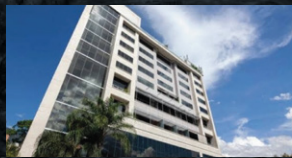
## Hotel Estelar Milla de Oro

El Poblado (+57) 6043696300  
[www.estelarmilladeoro.com](http://www.estelarmilladeoro.com)



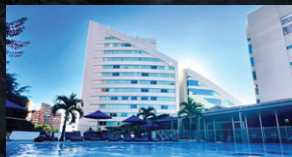
## Hotel Heiss

El Poblado (+57) 313 5250564  
[www.heisshotel.com](http://www.heisshotel.com)



## Hotel Poblado Plaza y Alejandría

El Poblado (+57) 604 6040872  
[www.hotelpobladoplaza.com](http://www.hotelpobladoplaza.com)



## Hotel San Fernando Plaza

El Poblado (+57) 604 4445353  
[www.hotelsanfernandoplaza.com](http://www.hotelsanfernandoplaza.com)



## V Grand Hotel

El Poblado (+57) 314 4583693  
[www.v-grandhotels.com/es](http://www.v-grandhotels.com/es)

# Medellin: the ideal setting

Recognized as one of the most innovative cities in Latin America, Medellín offers international connectivity, hotel infrastructure, gastronomy, culture, and a business and academic ecosystem ideal for a world-class event.

For both national and international attendees, Medellín represents a unique opportunity to enjoy a high-level experience in a vibrant, modern, safe city, globally recognized for its capacity for transformation.

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**SECURE YOUR SPOT**

**Be part of the event that is redefining global mining.**

[www.sdimi.enlaceingenieria.co](http://www.sdimi.enlaceingenieria.co)

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